

WHAT IS CLAIMED IS:

1. A base station apparatus, comprising:  
a plurality of connectors used for connection to a plurality of  
antennas respectively;  
a plurality of transmission/reception circuits performing  
5 transmission/reception using said plurality of antennas; and  
an antenna switching unit provided between said plurality of  
connectors and said plurality of transmission/reception circuits and  
modifying a connection relation between said plurality of connectors and  
said plurality of transmission/reception circuits.

10 2. The base station apparatus according to claim 1, wherein  
said plurality of antennas are divided into a plurality of groups, a  
number of which is equal to a number of said plurality of  
transmission/reception circuits,

5 said base station apparatus further comprises a control unit, and  
when said antenna switching unit is at a initial state, said control  
unit obtains properties of said plurality of antennas via said plurality of  
connectors, determines to which of said plurality of groups each of said  
plurality of antennas should belong, based on said obtained properties, and  
10 causes a state of said antenna switching unit to make a transition from  
said initial state to a use state suitable for use.

3. The base station apparatus according to claim 2, wherein  
said control unit includes  
a transmission circuit transmitting a test radio wave using one of  
said plurality of antennas connected to one of said plurality of connectors as  
5 a transmission antenna,  
a reception circuit receiving said test radio wave using antennas  
other than said transmission antenna among said plurality of antennas as  
a reception antenna,  
a recording circuit extracting and recording information from

- 10 reception signals of said test radio waves for each of said plurality of  
antennas from said reception circuit,  
a selection control circuit giving an instruction to said antenna  
switching unit to sequentially switch a connector to be connected to said  
transmission circuit among said plurality of connectors, and  
15 a control circuit presuming antenna arrangement from said  
information recorded on said recording circuit and determining setting for  
said use state of said antenna switching unit.
4. The base station apparatus according to claim 2, wherein  
said plurality of antennas are connected to a plurality of elements  
respectively, the plurality of elements having properties different from each  
other, corresponding to arrangement positions,  
5 said control unit includes  
a measurement circuit measuring said properties of each of said  
plurality of elements via said plurality of connectors, and  
a control circuit presuming antenna arrangement based on a  
measurement result of said measurement circuit and determining setting  
10 for said use state of said antenna switching unit.
5. The base station apparatus according to claim 4, wherein  
said plurality of elements are resistance elements.